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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,462	03/31/2000	Yue Xiong	5470-255	3846

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EXAMINER	
STEADMAN, DAVID J	

ART UNIT	PAPER NUMBER
1652	16

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/541,462	XIONG ET AL.	
	Examiner	Art Unit	
	David J. Steadman	1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-48 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-48 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Application Status

[1] Claims 1-48 are pending in the application.

[2] Receipt of a computer readable form of the sequence listing and a paper copy thereof in Paper No. 14 is acknowledged.

Election/Restrictions

[3] Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claim(s) 1-7 and 13-16, drawn to an isolated polynucleotide encoding ROC1, an expression vector, a cell, an antisense oligonucleotide, and a method for producing a protein, classified in class 435, subclass 69.1.

II. Claim(s) 8 and 9, drawn to an isolated ROC1 protein, classified in class 530, subclass 350.

III. Claim(s) 10-12, drawn to an antibody that specifically binds a ROC1 polypeptide, classified in class 530, subclass 387.9.

IV. Claim(s) 17, drawn to a method for detecting a polynucleotide encoding ROC1, classified in class 435, subclass 6.

V. Claim(s) 18-24 and 30-33, drawn to an isolated polynucleotide encoding ROC2, an expression vector, a cell, an antisense oligonucleotide, and a method for producing a protein, classified in class 435, subclass 69.1.

VI. Claim(s) 25 and 26 drawn to an isolated ROC2 protein, classified in class 530, subclass 350.

VII. Claim(s) 27-29, drawn to an antibody that specifically binds a ROC2 polypeptide, classified in class 530, subclass 387.9.

VIII. Claim(s) 34, drawn to a method for detecting a polynucleotide encoding ROC2, classified in class 435, subclass 6.

IX. Claim(s) 35, 36, 42, 43, 45, 46, and 48, drawn to a method for screening for a bioactive agent capable of binding to or modulating a ROC1 protein, classified in class 435, subclass 4.

X. Claim(s) 35, 37, 42, 44, 45, 47, and 48, drawn to a method for screening for a bioactive agent capable of binding to or modulating a ROC2 protein, classified in class 435, subclass 4.

XI. Claim(s) 38, 39, and 41, drawn to a method for screening for a bioactive agent capable of interfering with the binding of a ROC1 protein and a cullin protein, classified in class 435, subclass 4.

XII. Claim(s) 38, 40, and 41, drawn to a method for screening for a bioactive agent capable of interfering with the binding of a ROC2 protein and a cullin protein, classified in class 435, subclass 4.

[4] The inventions are distinct, each from the other because:

[5] The polynucleotides of Groups I and V are structurally distinct molecules encoding structurally distinct polypeptides. Therefore, where structural identity is required, such as for hybridization or protein expression, the different polynucleotide sequences have different effects.

[6] The polypeptides of Groups II and VI are structurally distinct molecules. Therefore, where structural identity is required, such as for the generation of antibodies, the different sequences have different effects.

[7] The antibodies of Groups III and VII are structurally distinct molecules that bind structurally distinct polypeptides. Therefore, where structural identity is required, such as for polypeptide purification, the different sequences have different effects.

[8] The polynucleotides of Groups I and V, the polypeptides of Groups II and VI, and the antibodies of Groups III and VII each comprises a chemically unrelated structure capable of separate manufacture, use, and effect. The polynucleotides of Groups I and V have other utility besides encoding polypeptides such as a hybridization probe, the polypeptides of Groups II and VI can be made by another method such

as purification from the natural source or *in vitro* synthesis, and the antibodies of Groups III and VII can be made from a polypeptide other than those of Groups II and VI, such as a polypeptide purified from the natural source or synthesized *in vitro*.

[9] The polynucleotides of Groups I and V and the methods of Groups IV, VIII, IX, and X are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polynucleotides of Groups I and V can be used for protein expression.

[10] The polynucleotides of Groups I and V are unrelated to the method(s) of Groups XI and XII as they are neither used nor made by the method(s) of Groups XI and XII.

[11] The polypeptides of Groups II and VI are unrelated to the method(s) of Group IV and VIII as they are neither used nor made by the method(s) of Group IV and VIII.

[12] The polypeptides of Groups II and VI and the methods of Groups IX-XII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polypeptides of Groups II and VI can be used as antigens in the production of antibodies.

[13] The antibodies of Groups III and VII are unrelated to the method(s) of Groups IV and VIII-XII as they are neither used nor made by the method(s) of Groups IV and VIII-XII.

[14] The methods of Group IV and VIII-XII are independent as they comprise different steps, utilize different products and yield different results.

[15] MPEP 803 sets forth two criteria for restricting between patentably distinct inventions – 1) the inventions must be independent or distinct and 2) there must be a serious burden on the examiner. MPEP 803 states, "For purposes of the initial requirement, a serious burden on the examiner may be *prima facie*

shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search as defined in MPEP 808.02". Because the inventions of Groups I-XII are distinct for the reasons given above, have separate classification, and/or each of the inventions requires a separate patent and non-patent literature and/or sequence search, restriction for examination purposes is proper.

[16] A telephone call was made to Ms. Karen A. Magri on 02/06/03 to request an oral election to the above restriction requirement, but did not result in an election being made.

[17] Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

[18] Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Steadman, whose telephone number is (703) 308-3934. The Examiner can normally be reached Monday-Thursday from 6:30 am to 5:00 pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (703) 308-3804. The FAX number for Group 1600 is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Art Unit receptionist whose telephone number is (703) 308-0196.

DJS
David J. Steadman, Ph.D.
Patent Examiner
Art Unit 1652

REBECCA E. PROUTY
PRIMARY EXAMINER
GROUP ~~1800~~ 1600